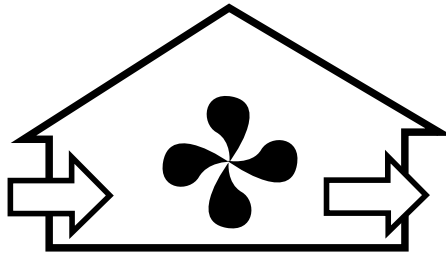


Honeywell

**ER150, ER200,
HR150, HR200
Perfect Window™
Fresh Air Ventilation
Systems**

OWNER'S MANUAL



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Introduction

We take it for granted that our homes will protect us from the elements, but because of tighter, energy efficient home construction, our indoor environment may be exposing us to unacceptable levels of the very things we are trying to escape. Excessive heat, dryness, humidity, toxic gases and dust contaminants can be sealed in securely by weatherproofing.

Feeling right at home

Unlike what the outdoors brings us, you can have control of indoor conditions. Temperature, humidity levels and air quality can all affect physical health, mental attitude, general comfort and energy savings. With today's technological advances, you can achieve a "Perfect Climate" indoors.

The Honeywell Perfect Window™ Fresh Air Ventilation System removes stale, unhealthy air and replaces it with a stream of fresh air. Its powerful centrifugal blowers bring fresh air into your home and at the same time, exhaust stale air in an equal amount. Both incoming and outgoing airstreams pass through either a heat transfer core or an energy transfer core where the heat only or the heat and the moisture from the exhaust air are efficiently transferred to the incoming fresh air. An air duct system supplies the fresh air brought in by the Perfect Window™ ventilator and distributes it throughout your home. Another duct draws the existing stale, air back to the Perfect Window™ ventilator and then exhausts it outdoors.

It's really very simple...and remarkably effective! The Perfect Window™ Fresh Air Ventilation System consists of:

1. Air Circulation FAN and Motor

Inside the casing are two fans, one for exhaust and one for fresh air supply. The electric motor that operates the fan is 1/15 hp to 1/20 hp (depending on the ventilator model) and uses the same amount of power as a 100 watt light bulb.

2. Air Filters

There are two permanent washable air filters in your ventilator. The filters lower the amount of dust and outside particulates entering the ventilator core and your fresh air supply.

3. Condensate Tray and Drain (Some Models)

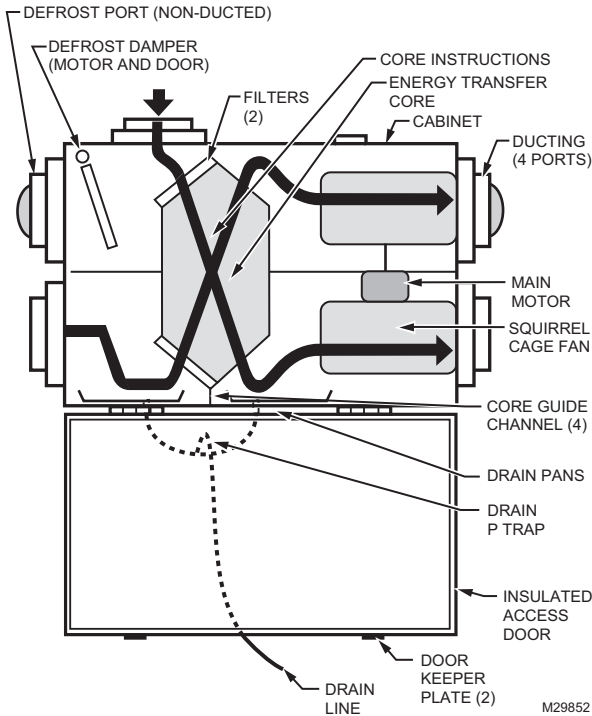
Condensation normally forms on the energy transfer core during the cold weather (below 27°F or -3°C). Moisture can build up when the warm air from your home comes in contact with the cold air from outside. The tray collects the moisture and funnels it to the drain. The drain pans are made of thermoformed plastic for easy cleaning.

4. Defrost Mechanism (Some Models)

Some models have an electronically-controlled damper frost control mechanism to prevent frost buildup on the core. Defrost timing will change based on incoming outdoor air temperature.

Outdoor Temperature	Defrost Timer
27°F (-3°C)	3 minute defrost/25 minute run
-4°F (-20°C)	4.5 minute defrost/17 minute run
-31°F (-35°C)	7 minute defrost/15 minute run

Example: When the outside temperature drops below 27°F (-3°C) the defrost timer is activated. At the end of the 25-minute run cycle, when the core can experience some nominal frost buildup, the timer activates a motor-driven damper door that simultaneously opens the defrost port and closes off the supply air port.



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5a. Energy Transfer Core

As the exhaust and fresh air pass through opposite sides of the Energy Transfer Core, heat is transferred from the warm side to the cold side. This heat transfer reduces the cost of conditioning the fresh outside air that is brought into your home. This increases the temperature of the fresh air brought inside in the winter and cools the fresh air brought inside in the summer. In addition, for ER150 and ER200 models, moisture is transferred from the wet side to the dryer side. The core removes easily for cleaning.

5b. Heat Transfer Core

As the exhaust and fresh air pass through opposite sides of the Heat Transfer Core heat is transferred from the warm side to the cold side. This heat transfer reduces the cost of conditioning the fresh outside air that is brought into your home. This increases the temperature of the fresh air brought inside in the winter and cools the fresh air brought inside in the summer. The core removes easily for cleaning.

Operating your Fresh Air Ventilation System

Changing Fan Speed

Depending on the control installed with your ERV, you might be able to change the fan speed. Check the manual of your control for more information.

Connecting a Remote Device

Your ventilator comes equipped with a low voltage terminal strip for connection to several optional control devices.

EXTERNAL REMOTE WALL CONTROL (DEHUMIDISTAT)

The dehumidistat (connected to your ventilator) is designed to control the operation of the ventilator fan to help keep the humidity level in your home comfortable. If an independent humidifier is installed and set at 30% (a normal indoor winter level) then the dehumidistat (for the ventilator) should be set at least 10% higher, in this case 40%. With the ventilator operating on low speed and no one at home to produce humidity, the humidifier will keep the humidity level at its setpoint. If the humidity levels rise (due to occupant activity) above the 40% level, then the dehumidistat will automatically increase the speed of the ventilator fan to high until the humidity level falls below 40%.

NOTE: During the winter months, the air inside your home usually contains more moisture than the outside air even though the outside relative humidity is higher than the inside relative humidity. The ventilator will automatically turn off the dehumidistat feature during the summer months when the outside air contains more moisture than the inside air.

TIMER

For your convenience, Honeywell provides an optional timer control that can fit a wide variety of needs, for example, exhaust humid air from the bathroom or kitchen (see the timer instructions for selection and part numbers).

WALL SWITCH

A wall switch can also be used to switch your ventilator fan speed to high. The fan will run at high speed until the wall switch is turned off.

The remote device can be wired to run the ventilator at either the high or low speed.

Getting the most from your Fresh Air Ventilation System

HOW MUCH VENTILATION DO I NEED?

During the seasons that your windows and doors are closed (winter and summer if you have air conditioning), the ventilator should operate continuously when the home is occupied, and either continuously or intermittently when not occupied.

For most installations, the ventilator will normally be set to operate continuously on low speed with the option of going to high speed as the need arises. For example, if you are entertaining and there is a large number of people present (some may be smoking), the ventilator should be switched to high speed.

YOUR VENTILATOR MAY BE SET TO HIGH SPEED:

if the system includes an optional remote control, switch it to the ON position.

NOTE: To set an optional dehumidistat, refer to the previous section of this booklet. To operate other remote devices, refer to the device owner's manual.

Maintenance Instructions for your Fresh Air Ventilation System



WARNING

Electrical Shock Hazard.

Can cause personal injury or equipment damage.

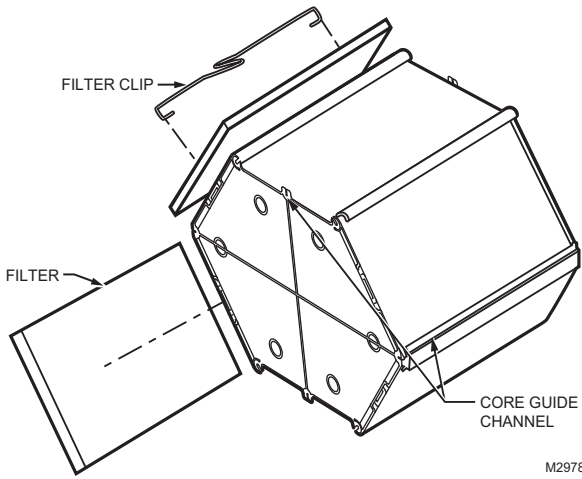
Disconnect power supply before performing maintenance.

The Perfect Window™ Fresh Air Ventilation System must be maintained on a regular basis for best efficiency. Honeywell recommends that the ventilator be cleaned and checked at least twice a year, preferably at the beginning of each heating and cooling season.

Check and Clean

EXTERIOR HOODS

Exterior hoods should be inspected at least once a month. Be sure exhaust and fresh air supply hoods are not blocked up or restricted by leaves, grass or snow. In winter, it is especially important to make sure snow is not blocking the hoods or that frost has not built up on the wire mesh (bird screen).



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⚠ WARNING

Carbon Monoxide Hazard.

Can cause personal injury or equipment damage.

Hood blockage can cause a change of pressure in building which can lead to possible spillage from combustible appliances.

CLEANING FILTERS AND CORE

Air filters should be cleaned twice a year. The standard filters supplied with your ventilator are removable and washable. Core should be cleaned twice each year.

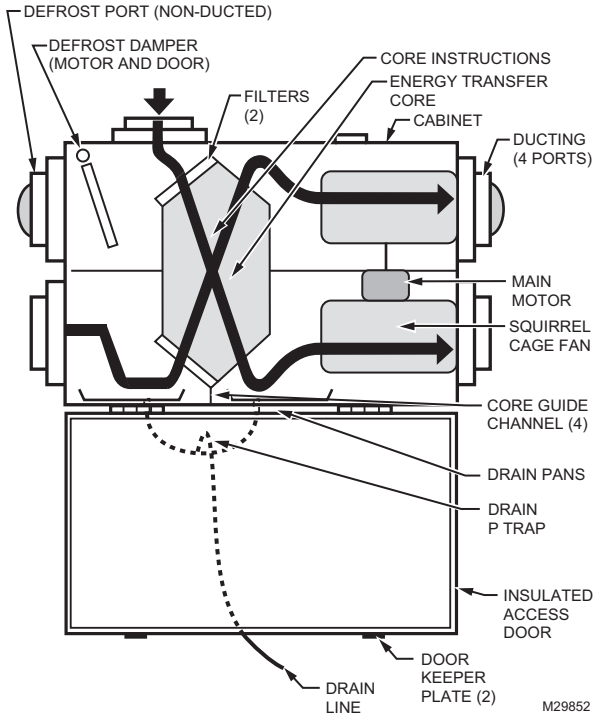
1. Open ventilator door by loosening draw latches on top of unit and swinging door open. For easier access, remove door by moving it right to disengage hinges.
2. Carefully grip ends of core, (be careful not to damage the aluminum fins); then pull evenly outward. Core fits tightly, but slides out of channels.
3. Once core is removed, filters can be removed by detaching the clips holding them in place. Note clip installation for reassembly.
- 4a. ERV core: Vacuum the ERV core or rinse with cold water. Do not use soap, dishwasher, or a pressure washer.
- 4b. HRV core: Soak and rinse the HRV core in warm soapy water. Do not use cleaning solutions.
5. Wash the filters in warm soapy water.
6. Place the clean filter (wet or dry) over the core and secure it in place with the clips.
7. Reinstall core by sliding it into the four corner channels. (Water cannot damage gasket and label on core ends, so it is not necessary to remove them from the core.).

NOTE: The core is designed to appear to protrude from the cabinet approximately 1/8 in. (3mm) so the access door fits tightly against the core.

DRAIN LINE (SOME MODELS)

Clean the drain line once a year.

1. Inspect the drain line, drain spout and P trap for blockage, mold or kinks.
2. Flush with warm soapy water and replace if worn or bent, or if it can not be cleaned.



GENERAL MAINTENANCE

Twice a year, wipe the inside of the cabinet with a damp cloth to remove dirt, bugs and debris that can be present.

FANS

If the fans accumulate dirt, it could cause an imbalance and excessive vibration of the ventilator. A reduction in air flow can also occur. In a newly constructed house, this often happens within the first year due to heavy dust residue in the entire system. It can also occur periodically, depending on the outdoor conditions. If you suspect that service is required, please contact the ventilator installer or your local HVAC contractor.

Troubleshooting

Lack of power to the ventilator:

- Power failure of electrical box.
- Loose or unplugged power cord.
- Faulty breaker or fuse in home's electrical panel.
- Call your installation contractor.

Power to the ventilator, but no fan operation:

- Ventilator is in standby mode and optional remote dehumidistat is set to OFF or the humidity setting is higher than room humidity.
- Door is not closed properly, the safety interlock switch will keep the ventilator off. Check that the access door is firmly closed and latched.
- Refer to operating instructions.
- Call your installation contractor for service.

Limited Warranty

Honeywell warrants this product, to be free from defects in the workmanship or materials, under normal use and service, for a period of one (1) year from the date of purchase by the consumer. If, at any time during the warranty period, the product is defective or malfunctions, Honeywell shall repair or replace it (at Honeywell's option) within a reasonable period of time.

If the product is defective

- (i) return it, with a bill of sale or other dated proof of purchase, to the retailer from which you purchased it, or
- (ii) package it carefully, along with proof of purchase (including date of purchase) and a short description of the malfunction, and mail it, postage prepaid, to the following address:
Honeywell Return Goods
Dock 4, MN10-3860
1985 Douglas Drive North
Golden Valley, MN 55422

This warranty does not cover removal or reinstallation costs. This warranty shall not apply if it is shown by Honeywell that the defect or malfunction was caused by damage which occurred while the product was in the possession of a consumer.

Honeywell's sole responsibility shall be to repair or replace the product within the terms stated above. HONEYWELL SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE OF ANY KIND, INCLUDING ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING, DIRECTLY OR INDIRECTLY, FROM ANY BREACH OF ANY WARRANTY, EXPRESS OR IMPLIED, OR ANY OTHER FAILURE OF THIS PRODUCT. Some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation may not apply to you.

THIS WARRANTY IS THE ONLY EXPRESS WARRANTY HONEYWELL MAKES ON THIS PRODUCT. THE DURATION OF ANY IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IS HEREBY LIMITED TO THE ONE YEAR DURATION OF THIS WARRANTY. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

If you have any questions concerning this warranty, please write Honeywell Customer Relations, 1985 Douglas Dr N, MN10-1461, Golden Valley, MN 55422. In Canada, write Honeywell Limited/Honeywell Limitée, 35 Dynamic Dr, ON15, Toronto Ontario M1V 4Z9.

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